Title (en)
Synthesized oscillation circuit

Title (de)
Synthetisierte Oszillator Schaltung

Title (fr)
Circuit oscillateur synthétisé

Publication
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Application
EP 97301314 A 19970227

Priority
JP 5290396 A 19960311

Abstract (en)
A synthesized oscillation circuit that can relax a limit of the maximum operational frequency. A mixer (MX) (14), a bandpass filter (BPF) (16), an amplitude limiting amplifier (LIM) (18), a phase detector (PD) (20), a low-pass filter (LPF) (22), and a voltage-controlled oscillator (VCO) (24) are serially connected between a signal input terminal (IN) (10) and a signal output terminal (OUT) (12). The signal output terminal (OUT) is connected the mixer (MX) and the phase detector (PD). The bandpass filter (BPF) has the filtering characteristic which blocks the sum frequency component of the frequency component of an input signal from the signal input terminal (IN) to the mixer (MX) and the frequency component of an output signal from the voltage-controlled oscillator (VCO) to the mixer (MX) but passes the difference frequency component between them. The low-pass filter (LPF) has the filtering characteristic which blocks the sum frequency component of the frequency component of a signal from the voltage-controlled oscillator (VCO) to the phase detector (PD) and the frequency component of a signal from the voltage-controlled oscillator (VCO) to the phase detector (PD) but passes the difference frequency signal between them.

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